# ENGINEERING AND RELATED SERVICES April 20, 2012

CONTRACT NO. 4400002849
RETAINER CONTRACT FOR INTELLIGENT TRANSPORTATION
SYSTEMS (ITS) STATEWIDE SYSTEM DESIGN, INTERGRATION
AND SYSTEM VERIFICATION SERVICES
STATEWIDE

Under Authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues a Request for Qualification Statements (RFQ) on DOTD Form 24-102 (24-102), "Professional Engineering and Related Services", revised November 2011, from Consulting Firms (Consultant) to provide engineering and related services. All requirements of Louisiana Professional Engineering and Land Surveying (LAPELS) Board must be met at the time of submittal. One Prime-Consultant/Sub-Consultant(s) (Consultant/Team) will be selected for this Contract.

**Program Manager** – Mr. Stephen Glascock **Project Manager** – Ms. Carryn Ferrier

All inquiries concerning this advertisement should be sent in writing to Alan.Dale@LA.gov.

#### PROJECT DESCRIPTION

The selected Consultant/Team shall perform system engineering, integration and support services, system analysis, independent verification and validation (IV&V) services, develop system designs, specifications and cost estimates and provide GIS services to support the LADOTD ITS Programs project efforts in the areas of Video Distribution, Traveler Information Services, Data Validation & Dissemination and Advanced Traffic Management Systems for the Statewide and Regional Intelligent Transportation Systems (ITS) Transportation Management Systems (TMS). The Consultant/Team will be requested to provide marketing services for the ITS Program targeting both internal and external customers of the various services provided by the ITS Program. The Consultant/Team will also be tasked to provide performance measurement reporting support for the ITS Program drawing upon the vast resources available within the ITS Section. The Consultant/Team shall be required to execute a Task Order (TO) for each designated project which will specify the scope of services, contract time, and compensation. Each TO will become part of the Retainer Contract.

#### **SCOPE OF SERVICES**

The services to be rendered for this Retainer Contract shall consist of the following Stage(s) and Part(s):

#### 1. PROJECT MANAGEMENT AND PROGRAM ASSISTANCE

Depending on the nature and scope of work being performed, Project Management may be continuous throughout a Task Order.

A meeting with the DOTD's ITS Section, the Consultant, and any third party applicable to a particular project, shall be held at the beginning of each task order development. The purpose of this meeting is to develop a detailed scope of services based on establishing a framework for continued coordination, developing a mutual understanding of the deliverables, identifying the execution of work, and agreeing on design procedures. Information, where applicable, such as ITS Strategic Business Plans or Statewide/Regional Architectures shall be provided and/or requested at this meeting. Minutes shall be developed by the Consultant and distributed after this meeting.

#### 2. COORDINATION MEETINGS & PROJECT REPORTING

The Consultant shall conduct periodic coordination meetings as agreed to by the Project Manager to discuss contract and task order status. The Consultant shall develop a progress schedule at the beginning of each task order upon Notice to Proceed (NTP), to be approved by the Project Manager, and shall provide updated progress schedules on a monthly basis along with a monthly status report to be submitted with invoices. The Consultant shall be responsible for making sure the project schedule is being kept. The status report shall include at a minimum a discussion of the previous month's progress, problems that were encountered, unresolved issues, anticipated work for the next month and a record of comments.

## 3. PERFORM SYSTEM ENGINEERING ANALYSES

The Consultant shall perform various ITS system engineering analyses, studies, evaluations, and reports as directed by the Project Manager. Such work includes: performing ITS product reviews, developing pros/cons associated with these products, developing system alternatives and providing recommendations using DOTD-standard software, and engineering alternative analyses and feasibility studies.

# 4. SYSTEM DESIGN PLANS, SPECIFICATIONS & COST ESTIMATES

The Consultant shall develop system design plans, specifications and cost estimates for various ITS related projects as directed by the Project Manager. Projects may include new ITS deployments, upgrades and/or replacement of existing systems. Plans shall be developed in Microsoft Office programs.

#### 5. SYSTEM INTEGRATION SERVICES

The Consultant/Team shall design and develop the necessary subsystems and/or performance measure reporting tools, as directed by the Project Manager, to provide the necessary system integration and reporting between the various TMS components in use by the ITS Section and others. Projects may include but not limited to web site interfaces

to databases, specialized traffic data reports, traveler information services applications, performance measure reporting tools and specialized performance measure reports.

#### 6. INDEPENDENT VERFICATION AND VALIDATION (IV&V)

The Consultant/Team shall oversee, manage, monitor and/or evaluate testing activities including the final system acceptance testing and document all test results for system deployments and/or enhancements to existing systems as directed by the Project Manager. If required, the Consultant/Team shall perform the actual testing activities as directed by the Project Manager.

## 7. GIS SUPPORT SERVICES

The Consultant/Team shall develop data and map products using ESRI ArcServer and .NET technologies as directed by the Project Manager. Projects will include mapping of ITS field devices, fiber networks, inventory and maintenance records.

#### 8. MARKETING SUPPORT SERVICES

The Consultant/Team shall recommend marketing strategies that will be targeted to both internal and external customers of the various services provided by the ITS Program. If required, The Consultant/Team shall oversee, manage, and monitor the marketing plans, implement and report on the effectiveness of these marketing activities.

#### 9. DATA DELIVERABLES

The necessary copies of Architectures, SE Analyses, system design plans, estimate of quantities and cost, studies/evaluations, reports, ITS network diagrams, and all other applicable work performed under this Contract shall be delivered from the Consultant/Team to the DOTD's ITS Section in electronic format and/or hard copy format as directed by the Project Manager. The electronic data shall be in the original software format.

GIS layers of final plans shall be submitted by the Consultant/Team in layer format compatible with DOTD accepted GIS software, ARCGIS and shall be submitted with FGDC compliant metadata. All features shall be spatially correct, preferably by use of GPS coordinate data. GIS data features shall include all items specified in the Mapping and ITS Layout Civil Plan Sheets, Electrical/Communications/Civil/Structural/Intersection Plan Detail Sheets and shall link to tables of descriptive data.

#### REFERENCES

All services and documents will meet the standard requirements as to format and content of the DOTD; and will be prepared in accordance with the latest applicable editions, supplements and revisions of the following:

- 1. AASHTO Standards, ASTM Standards or DOTD Test Procedures
- 2. DOTD Location and Survey Manual
- 3. DOTD Roadway Design Procedures and Details
- 4. DOTD Hydraulics Manual
- 5. DOTD Standard Specifications for Roads and Bridges
- 6. Manual of Uniform Traffic Control Devices (2003 Edition)
- 7. DOTD Traffic Signal Design Manual
- 8. National Environmental Policy Act (NEPA)
- 9. National Electric Safety Code
- 10. National Electric Code (NFPA 70)
- 11. DOTD Environmental Impact Procedures (Vols. I-III)
- 12. Policy on Geometric Design of Highways and Streets
- 13. Construction Contract Administration Manual
- 14. Materials Sampling Manual
- 15. DOTD Bridge Design Manual
- 16. Consultant Contract Services Manual
- 17. Geotechnical Engineering Services Document
- 18. Bridge Inspectors Reference Manual, October 2002
- 19. Manual of Instruction for Preparation of Engineering Proposals, rev. June 1, 1998
- 20. The National ITS Architecture, Version 6.0, available from the FHWA Web Site
- 21. The Road to Successful ITS Software Acquisition, USDOT Publication, Report No. FHWA-JPO-98-035, Sponsoring Agency Code HVH-1, July 1998.

#### **COMPENSATION**

Compensation to the Consultant for services rendered in connection with each TO shall be made on the basis of actual cost plus a negotiated fixed fee, prior to each TO being issued. Reimbursable expenses will be paid at the prevailing state rates.

The amount payable under this Retainer Contract for services to be performed under the various TO's shall not exceed a maximum of \$1,000,000. Each TO shall be payable under the respective TO project number which shall be obtained by the Project Manager.

All travel related expenses will be compensated under direct expenses, and will be in accordance with Louisiana Office of State Travel regulations found at: <a href="http://www.doa.louisiana.gov/osp/travel/travelpolicy.htm">http://www.doa.louisiana.gov/osp/travel/travelpolicy.htm</a>. Vehicle rental rates will require prior approval from the DOTD Project Manager.

#### CONTRACT TIME AND NOTICE TO PROCEED

This Retainer Contract shall be in effect for the duration of **two years**. The services to be performed for each Task Order (TO) will be determined prior to the execution of the TO. The Consultant will proceed with the services required in the TO upon issuance of the Notice to Proceed from the DOTD. The contract time for each TO, will be specified in the executed TO. Any TO in effect, prior to the expiration date of the Retainer Contract shall be completed.

#### **ELECTRONIC DELIVERABLES**

The Consultant hereby agrees to produce electronic deliverables in conformance with "DOTD Software and Deliverable Standards for Electronic Plans" as outlined at <a href="http://www.dotd.louisiana.gov/highways/project\_devel/design/electronic\_standards\_disclaimer.as\_p.">http://www.dotd.louisiana.gov/highways/project\_devel/design/electronic\_standards\_disclaimer.as\_p.</a>
The Consultant shall download and apply the latest CAD standards. The Consultant hereby agrees to install incremental updates to software and CAD standards as instructed by the Project Manager. Such updates will not have a significant impact on the development time or delivery date for project plans, or require the Consultant to purchase additional software. Prior to proceeding with plan development, the Consultant shall contact the Project Manager for any special instructions regarding updates to standards or project-specific requirements if this information has not already been provided.

In the event that any electronic standard conflicts with written documentation, including DOTD plan-development manuals, the electronic standard typically governs. The Consultant is responsible for contacting the Project Manager should questions arise.

Plan deliveries shall be made on CD or DVD media and labeled with media-compatible indelible ink on separate lines as follows:

State Project Number

"Final Plans Submittal", "60% ACP Submittal" (or other milestone)

"Electronic Deliverables"

Consultant Firm Name

The CD/DVD shall be delivered with a signed cover letter that includes, among the formalities, a deliverable "hash" code that is documented in a report generated by the ControlCAD Indexer Submittal tool. The hash code is used to verify that the CD is authentic. At any stage of the plan development process, the Project Manager may require plan delivery by other methods including, but not limited to, upload to the DOTD ProjectWise repository.

The prime Consultant is responsible for ensuring that Sub-Consultants are prepared to produce electronic deliverables in conformance with DOTD electronic standards for plans.

## **QUALITY CONTROL/QUALITY ASSURANCE**

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program or adopt DOTD's program; in order to provide a mechanism by which all construction plans can be subject to a systematic and consistent review. Consultant's must ensure quality and adhere to established design policies, procedures, standards and guidelines in the preparation and review of all design products. The DOTD shall provide limited input and technical assistance to the Consultant. The Consultant's plans shall meet or exceed DOTD's Construction Plans Quality Control / Quality Assurance Manual and EDSM No. Volume I. 1.1.24 on Plan Quality. The Consultant shall transmit plans with a DOTD Quality Control/Quality Assurance Checklist, Documentation Manual for Project Delivery, and a certification that the plans meet the DOTD's quality standards.

## MINIMUM PERSONNEL REQUIREMENTS

The following requirements must be met at the time of submittal:

- 1. At least one Principal or a Responsible Member of the Prime Consultant of a firm under consideration must have a Registered Professional Engineer in the State of Louisiana.
- 2. In addition to the above, the Prime Consultant must employ on a full time basis a minimum of two Registered Professional Engineers with at least five (5) years experience in ITS Engineering and /or System Design.
- 3. One Systems Analyst with formal instruction and training in structured system analysis and system design, and a minimum of two (2) years experience in the analysis and design of geographically dispersed control systems and networks (client software, server based software, communications infrastructure, field devices and how they are used in a control system, and center-to-center system design and operations) which include at a minimum cost/economic analysis, engineering-based performance measures, client operation and maintenance capabilities, alternative analysis and recommendations.
- 4. The Prime Consultant must also employ on a full-time basis, or through the use of a Sub-Consultant(s):
  - a. One licensed Electrical Engineer and/or Systems Engineer with a minimum of two years of design experience in ITS systems engineering.
  - b. One licensed Engineer with a minimum of four years experience in Information Systems and/or Network design with a minimum of two years specialized design in Intelligent Transportation Systems communications.
  - c. One Engineering or Information Technology Technician with a minimum of five (5) years experience in performing management and operations, system diagnostics and troubleshooting, system testing, and system maintenance of ITS systems.
  - d. One Engineering or Information Technology Technician with a minimum of two (2) years experience in design and support experience in Streaming Video Distribution systems.
  - e. One Information Technology Specialist with formal instruction and training in developing database and web applications.
  - f. One Marketing Professional with demonstrated experience in marketing services provided by government agencies.

Certifications of Compliance must be submitted with and made part of the Consultants DOTD Form 24-102 for all Personnel Requirements listed herein.

#### **EVALUATION CRITERIA**

The general criteria to be used by DOTD (when applicable) in evaluating responses for the selection of a Consultant to perform these services are:

- 1. Consultant's firm experience on similar projects, weighting factor of 3;
- 2. Consultant's personnel experience on similar projects, weighting factor of 4;
- 3. Consultant's firm size as related to the estimated project cost, weighting factor of 3;
- 4. Consultant's past performance on similar DOTD projects, weighting factor of 6;\*\*
- 5. Consultant's current work load, weighting factor of 5;
- 6. Location where the work will be performed, weighting factor of 4. \*

### Complexity level (**moderate**)

Consultants will be evaluated as indicated in Items 1-6. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of 0-4. Then the rating will be multiplied by the corresponding weighting factor. The firm's ratings in each category will then be added to arrive at the Consultant's final rating.

If Sub-Consultants are used, the Prime Consultant must perform a minimum of 51% of the work for the overall project. Each member of the Consultant/Team will be evaluated on their part of the contract, proportional to the amount of their work. The individual team member ratings will then be added to arrive at the Consultant/Team rating.

## **Communication Protocol**

DOTD's Project Evaluation Team will be responsible for performing the above described evaluation, and will present a short-list of the three (if three are qualified) highest rated Consultants to the Secretary of the DOTD. The Secretary will make the final selection. Below are the proposed Team members. DOTD may substitute for any reason provided the members meet the requirements of R.S. 48:291.

- 1. Alan Dale Ex officio
- 2. Carryn Ferrier Project Manager
- 3. Elizabeth Delaney
- 4. Pam Dixon
- 5. Sandy Wu
- 6. Lucy Kimbeng

## Rules of Contact (Title 48 Engineering and Related Services)

These rules are designed to promote a fair, unbiased, legally defensible selection process. The LA DOTD is the single source of information regarding the Contract selection. The following rules of contact will apply during the Contract selection process and will commence on the date of advertisement and cease at the contract execution by the selected firm. Contact includes face-to-face, telephone, facsimile, Electronic-mail (Email), or formal written communications. Any contact determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of the submittal (24-102):

<sup>\*</sup>Location will be based from Marksville, Louisiana.

<sup>\*\*</sup>The ITS Design (IT) performance rating will be used for this project.

- A. The Consultant shall correspond with the LA DOTD regarding this advertisement only through the LA DOTD Consultant Contracts Services Administrator;
- B. The Consultant, nor any other party on behalf of the Consultant, shall not contact any LA DOTD employees, including but not limited to, department heads; members of the evaluation teams; and any official who may participate in the decision to award the contract resulting from this advertisement except through the process identified above. Contact between Consultant organizations and LA DOTD employees is allowed during LA DOTD sponsored one-on-one meetings;
- C. Any communication determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of submittal, at the sole discretion of the LA DOTD;
- D. Any official information regarding the project will be disseminated from the LA DOTD'S designated representative on the LA DOTD website. Any official correspondence will be in writing;
- E. The LA DOTD will not be responsible for any verbal exchange or any other information or exchange that occurs outside the official process specified herein.

By submission of a response to this RFQ, the Consultant agrees to the communication protocol herein.

#### **CONTRACT REQUIREMENTS**

The selected Consultant will be required to execute the contract within 10 days after receipt of the contract.

**INSURANCE** - During the term of this contract, the Consultant will carry professional liability insurance in the amount of \$1,000,000. This insurance will be written on a "claims-made" basis. Prior to executing the contract, the Consultant will provide a Certificate of Insurance to DOTD showing evidence of such professional liability insurance.

**AUDIT** - The selected Consultant will allow the DOTD Audit Section to perform an annual overhead audit of their books, or provide an *independent* Certified Public Accountant (CPA) audited overhead rate. This rate must be developed using Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the Consultant will submit semi-annual labor rate information, when requested by DOTD.

The selected Consultant will maintain, an approved Project Cost System and segregate direct from indirect cost in their General Ledger. Pre-award and post audits, as well as interim audits, may be required. For audit purposes, the selected Consultant will maintain accounting records for a minimum of five years after final contract payment.

Any Consultant currently under contract with the DOTD and who has not met all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website (<a href="www.dotd.louisiana.gov">www.dotd.louisiana.gov</a>), will not be considered for this project.

# SUBMITTAL REQUIREMENTS

One original (**stamped "original"**) and **five** copies of the DOTD Form 24-102 must be submitted to DOTD. All submittals must be in accordance with the requirements of this advertisement and the Consultant Contract Services Manual. Any Consultant/Team failing to submit any of the information required on the 24-102, or providing inaccurate information on the 24-102, will be considered non-responsive.

Any Sub-Consultants to be used, including Disadvantaged Business Enterprises (DBE), in performance of this Contract, must also submit a 24-102, which is completely filled out and contains all information pertinent to the work to be performed.

The Sub-Consultant's 24-102 must be firmly bound to the Consultant's 24-102. In Section 8, the Consultant's 24-102 must describe the **work elements** to be performed by the Sub-Consultant(s), and state the approximate **percentage** of each work element to be subcontracted to each Sub-Consultant.

Name(s) of the Consultant/Team listed on the 24-102, must precisely match the name(s) filed with the Louisiana Secretary of State, Corporation Division, and the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

The DOTD Form 24-102 will be identified with Contract No. 4400002849, and will be submitted prior to 3:00 p.m. CST on Monday, May 7, 2012, by hand delivery or mail, addressed to:

Department of Transportation and Development Attn.: Mr. Alan Dale, P.E. Contracts Administrator 1201 Capitol Access Road, **Room 405-T** Baton Rouge, LA 70802-4438 or

Telephone: (225) 379-1401

#### **REVISIONS TO THE RFQ**

DOTD reserves the right to revise any part of the RFQ by issuing an addendum to the RFQ at any time. Issuance of this RFQ in no way constitutes a commitment by DOTD to award a contract. DOTD reserves the right to accept or reject, in whole or part, all Qualification Statements submitted and/or cancel this announcement if it is determined to be in DOTD's best interest. All materials submitted in response to this announcement become the property of DOTD and selection or rejection of a submittal does not affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the RFQ.